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REMARKS

In the application, claims 39-64 are pending. Claims 39-45, 47-50, 53, 54, 56 and 58-64 are rejected; claims 46, 51 and 52 are objected to. The Examiner's comments have been considered and the claims have been amended as set forth above to address issues identified in the Office Action. Applicants now request reconsideration of the application as amended.

Rejections under 35 U.S.C. §112

Claims 47-48, 50, 54 and 56 are allegedly rejected under 35 U.S.C. §112, second paragraph as being indefinite. In particular, the renumbering of the originally misnumbered claims resulted in certain dependencies being incorrect. The claims have been amended to provide further clarity regarding dependency.

The Office further alleges the terms "creep" and "bumping" to be indefinite. Applicants respectfully submit that the terms have well defined meanings and are recognized by those in the art. For example, see attached Exhibit A, which includes printouts from the websites of Genevac (www.genevac.co.uk), a major supplier of centrifugal evaporation systems, and www.scigene.com, which sells systems for genomic and chemical research. The terms "creep" and "bumping" are highlighted throughout the documents. Notwithstanding, both terms are fully defined in the written description. "Creep" is clearly defined in the specification at page 14, lines 3-4 ("potential carryover of solvent and/or compounds ("creep") between the wells" and at page 56, starting at line 24 "a phenomenon known as "creep" can occur, where solvent vapors can condense on or near the upper surface of the wells in the compound container and, over time, move from well to well, resulting in cross-contamination of compounds contained in the wells." The term "bumping" is likewise clearly defined on page 4, line 17 ("...'bumping', which can cause solid or liquid form material to be propelled out of the vial due to violent outgassing caused by boiling of the solvent". Applicants respectfully submit that the claims are definite as currently written with respect to the cited terms.

Double Patenting

Claims 39-64 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 13-14 and 21-22 of application Nos. 10/058,380 and 09/996,629. Applicants respectfully traverse these rejections.

Application No. 09/996,629 is abandoned (Notice of Abandonment issued 10/21/04), rendering the rejection moot. The Office further admits that the cited claims are not identical to the present claims and suggests a simple verbal comparison cures the defect. The simple assertion that both sets of claims are directed to automated methods of sample handling does not provide the asserted overlap in claim coverage. The present claim 39 is directed to automated method for processing of samples, not “automated sample handling” asserted by the office. The distinction between processing and handling is significant. The present claims are directed to processing, meaning chemical modification, on a solid support. Whereas automated sample handling carries a different and distinct meaning. Applicants respectfully submit the claims to be patentably distinct over the cited application.

Claims 39-64 are further provisionally rejected under 35 U.S.C. §101 over claims 39-46 and 48-65 of co-pending application serial No. 10/059,082. Applicants respectfully submit this rejection to be moot because the cited claims were canceled from the cited application in the Preliminary Amendment filed in that application on January 28, 2002. In light hereof, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. §102

Claims 39-42, 44-45, 49, 53-54, 56 and 58-64 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent 5,578,269 to Yaremko et al. (hereinafter “Yaremko”). Yaremko et al. disclose an automated blood analysis system with an integral centrifuge.

Applicants traverse this rejection because Yaremko does not disclose each and every element of the claimed invention. The present invention is directed to the automated

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processing of samples on solid supports. The term “solid support” is defined throughout the specification and is well known in the chemical arts to be solid support to which the compounds are bound. The claims are therefore directed to automated processing of samples and reactions, which occur on the solid support to which they are bound (see page 6, line 23). In Yaremko et al., the samples are not bound to solid supports, as presently claimed. Rather, the glass beads are simply filters in a column for separation. Furthermore, while Yaremko et al. describe their system as having an “integral centrifuge”, the actual integration is only in its proximity to other processing stations and not in the incorporation of the centrifuge in all aspects of the process. In step (b) of present claim 39, the samples are loaded onto the centrifuge rotor within the centrifuge chamber, then various processes occur, including dispensing (steps (c) – (g), heating (h + claim 40) and spinning (h). The system described by Yaremko et al. has separate stations for dispensing, incubation and centrifuging, and transfer between the different stations is effected by a robotic arm that physically moves the sample carrier from one place to another. Thus, the samples must be handled during every step of the process, which is a disadvantage that the presently-disclosed method and system are intended to overcome. (See discussion in the Background of the Invention of the present application at page 3, line 18 through page 5, line 10.) The present method is a streamlined method in which multiple processing steps, including dispensing, incubation, centrifuging (evaporation) and transferring the cleaved compounds into a storage contained can all occur within the closed centrifuge chamber. Accordingly, Yaremko does not disclose or teach every element of the claimed invention and, therefore, does not anticipate the presently claimed invention. Applicants respectfully request therefore withdrawal of the 35 U.S.C. §102(b) rejection.

Rejections under 35 U.S.C. §103

Regarding the rejection of claim 43, 55 and 57 under 35 U.S.C. §103, as being obvious in light of Yaremko, Applicants respectfully submit the arguments previously stated regarding Yaremko. The allegedly obvious addition of a vacuum pump cannot cure the deficiency of the Yaremko reference relative to other key aspects of the claimed invention. Applicants

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respectfully submit that optimization of a result effective variable cannot be contemplated where the variables themselves are absent. Specifically, addition of a vacuum pump for reduced pressure in the centrifuge chamber does not make it obvious to perform all processing operations within the chamber when Yaremko et al. teach a system that employs separate processing stations prior to loading the sample carrier into the centrifuge chamber. Accordingly, Applicants respectfully request that this rejection be withdrawn.


The title is amended to more closely reflect the subject matter of the claims of this divisional application. Amendments to the specification are made to include information not previously available and to correct minor typographical errors. No new matter is introduced by the amendments.

Applicants request reconsideration in light of the foregoing arguments and amendments. Applicants respectfully submit that the claims are in condition for allowance. Early notification of such is earnestly solicited.

Should the Examiner believe that handling of this application could be expedited by further discussion, he is kindly requested to telephone the undersigned attorney for Applicants.

Respectfully submitted,

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